



SLOVENSKI STANDARD

DSIST EN 301 145-5:2003

01-XYWVa VYf!% - -

8][]HJbc`ca fYy^Y`n]bhY[f]fUb]a]'gHcf]hj Ua]'fG8 BŁ!`Dfclrc_c`X][]HJbY`bUfc b]ý_Y
g][bU]nUWY^yH^%fB GG%Ł!`8 U`]bg_UgHcf]hYj `!XU`]bg_c`i`_fYdUb^Y!) "XY.`N[fUXVU
dfYg_i`ýU`bY[U`b]nU]b`bUa Yb`dfYg_i`ýUb`U`fHGG` HDŁ!`GdYWZ`_UWY`U`nU`hYfa]bU
dcbi Xb]_UgHcf]hj Y`fGDHŁ

Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Teleaction service; Part 5: Test Suite Structure and Test Purposes (TSS&TP) specification for the Service Provider Terminal (SPT)

Ta slovenski standard je istoveten z: EN 301 145-5 V1.1.6.2003

ICS:

33.080	Digitalno omrežje z integriranimi storitvami (ISDN)	Integrated Services Digital Network (ISDN)
--------	---	--

DSIST EN 301 145-5:2003 en

ETSI EN 301 145-5 V1.1.6 (1999-11)

European Standard (Telecommunications series)

**Integrated Services Digital Network (ISDN);
Digital Subscriber Signalling System No. one (DSS1) protocol;
Teleaction service;
Part 5: Test Suite Structure and Test Purposes (TSS&TP)
specification for the Service Provider Terminal (SPT)**



Reference

DEN/SPS-05106-5 (alp90ig0.PDF)

Keywords

bearer, DSS1, ISDN, service, teleaction,
teleservice, network, TSS&TP

ETSI

Postal address

F-06921 Sophia Antipolis Cedex - FRANCE

Office address

650 Route des Lucioles - Sophia Antipolis
Valbonne - FRANCE
Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16
Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

Internet

secretariat@etsi.fr
Individual copies of this ETSI deliverable
can be downloaded from
<http://www.etsi.org>
If you find errors in the present document, send your
comment to: editor@etsi.fr

Important notice

This ETSI deliverable may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference should be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

Copyright Notification

No part may be reproduced except as authorized by written permission.
The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 1999.
All rights reserved.

Contents

Intellectual Property Rights	4
Foreword	4
1 Scope	5
2 References	5
3 Definitions and abbreviations	6
3.1 Definitions	6
3.1.1 Definitions related to conformance testing	6
3.1.2 Definitions related to EN 301 145-1	6
3.2 Abbreviations	8
4 Test Suite Structure (TSS)	8
5 Test Purposes (TP)	9
5.1 Introduction	9
5.1.1 TP naming convention	9
5.1.2 Source of TP definition	9
5.1.3 TP structure	9
5.1.4 Test strategy	10
5.1.5 Data link procedures	10
5.2 SPT TPs for Teleaction bearer service	11
5.2.1 Procedures at the coincident S and T reference point (clause 9)	11
5.2.1.1 Data link establishment at EU/SP interface (subclause 9.1)	11
5.2.1.1.1 Normal procedures (subclause 9.1.1)	11
5.2.1.1.2 Exceptional procedures (subclause 9.1.2)	11
5.2.1.2 Data link disconnection at EU/SP interface (subclause 9.2)	11
5.2.1.2.1 Normal procedures (subclause 9.2.1)	11
5.2.1.2.2 Exceptional procedures (subclause 9.2.2)	11
5.2.1.3 Error procedures (subclause 9.3)	11
5.2.2 Maintenance, polling and broadcast procedures (clause 13)	12
5.2.2.1 Procedures (subclause 13.2)	12
5.2.2.1.1 Loop Procedures (subclause 13.2.2)	12
5.2.2.1.2 Alarm reporting Procedures (subclause 13.2.3)	13
5.2.2.1.3 Alarm clearance (subclause 13.2.4)	14
5.2.2.2 Broadcast procedures (subclause 13.3)	14
5.2.2.3 Status request procedure (subclause 13.4)	15
6 Compliance	16
7 Requirements for a comprehensive testing service	16
Bibliography	17
History	18

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<http://www.etsi.org/ipr>).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Signalling Protocols and Switching (SPS).

The present document is part 5 of a multi-part standard covering the Digital Subscriber Signalling System No. one (DSS1) protocol specification for the Integrated Services Digital Network (ISDN) Teleaction service, as described below:

- Part 1: "Protocol specification";
- Part 2: "Protocol Implementation Conformance Statement (PICS) proforma specification";
- Part 3: "Test Suite Structure and Test Purposes (TSS&TP) specification for the End User Terminal (EUT)";
- Part 4: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the End User Terminal (EUT)";
- Part 5: "Test Suite Structure and Test Purposes (TSS&TP) specification for the Service Provider Terminal (SPT)";**
- Part 6: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the Service Provider Terminal (SPT)";
- Part 7: "Test Suite Structure and Test Purposes (TSS&TP) specification for the Teleaction Management Function (TMF)";
- Part 8: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the Teleaction Management Function (TMF)".

National transposition dates	
Date of adoption of this EN:	29 October 1999
Date of latest announcement of this EN (doa):	31 January 2000
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 July 2000
Date of withdrawal of any conflicting National Standard (dow):	31 July 2000

1 Scope

The present document specifies the Test Suite Structure and Test Purposes (TSS&TP) for the Service provider Terminal (SPT) of the T reference point or coincident S and T reference point (as defined in ITU-T Recommendation I.411 [3]) of implementations conforming to the stage three standard for the Teleaction service for the pan-European Integrated Services Digital Network (ISDN) by means of the Digital Subscriber Signalling System No. one (DSS1) protocol, EN 301 145-1 [6].

Test Purposes described in this specification do not apply to Data Link establishment and Disconnection procedures contained in ETS 300 402-2 [5] or semi-permanent B channels in-band procedures in accordance with ETS 300 099 [4].

A further part of the present document specifies the Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma based on the present document.

Other parts specify the TSS&TP and the ATS and partial PIXIT proforma for the End User Terminal (EUT) and the Teleaction Management Function (TMF) of the T reference point or coincident S and T reference point of implementations conforming to EN 301 145-1 [6].

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

- [1] ITU-T Recommendation I.112 (1993): "Vocabulary and terms for ISDNs".
- [2] ITU-T Recommendation I.210 (1993): "Principles of the telecommunication services supported by an ISDN and the means to describe them".
- [3] ITU-T Recommendation I.411 (1993): "ISDN user-network interfaces - reference configurations".
- [4] ETS 300 099: "Integrated Services Digital Network (ISDN); Specification of the Packet Handler access point Interface (PHI)".
- [5] ETS 300 402-2: "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Data link layer; Part 2: General protocol specification [IUT-T Recommendation Q.921 (1993) modified]".
- [6] EN 301 145-1 (V1.1): "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Teleaction service; Part 1: Protocol specification".
- [7] EN 301 145-2 (V1.1): "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Teleaction service; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".
- [8] ISO/IEC 9646-1: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [9] ISO/IEC 9646-2: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract Test Suite specification".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply:

3.1.1 Definitions related to conformance testing

abstract test suite: refer to ISO/IEC 9646-1 [8]

implementation under test: refer to ISO/IEC 9646-1 [8]

Protocol Implementation Conformance Statement (PICS): refer to ISO/IEC 9646-1 [8]

PICS proforma: refer to ISO/IEC 9646-1 [8]

Protocol Implementation eXtra Information for Testing (PIXIT): refer to ISO/IEC 9646-1 [8]

PIXIT proforma: refer to ISO/IEC 9646-1 [8]

test purpose: refer to ISO/IEC 9646-1 [8]

3.1.2 Definitions related to EN 301 145-1

Bd channel: 64 kbit/s timeslot over which multiple D channel connections are multiplexed using the procedures of ETS 300 099 [4], clause 9

Bearer Service: see ITU-T Recommendation I.112 [1], definition 202

End User (EU): entity to whom a teleaction application service is provided or who is affected by that application service

End User Terminal (EUT): device (or location of a device) that, depending on the application (e.g. by monitoring of subdevices):

- on the basis of local conditions or by interrogation, generates information and presents this information for transmission by the network to a service provider (SP);
- receives information from a SP in order to affect local conditions;
- upon polling requests, received from a Teleaction Management Function (TMF), executes the requested local actions (e.g. authorization, functionality checks, etc.) and sends appropriate response to the TMF.

EU access capability: telecommunication means used between an EUT and a TMF (e.g. ISDN bearer service, dedicated connection, etc.)

integrated services digital network: see ITU-T Recommendation I.112 [1], definition 308

network: DSS1 protocol entity at the Network side of the user-network interface where a T reference point or coincident S and T reference point applies

service provider: entity which, by using one or more TMFs, provides a teleaction application service to one or more EUTs

NOTE: The SP may be the Basic Network Provider (BNP), the TMFP, or another organization responsible for one or more SPTs.